

## Souvenir Volume, April 12, 1909

AERIAL EXPERIMENT ASSOCIATION BULLETIN XXXIX SOUVENIR VOLUME

MRS. ALEXANDER GRAHAM BELL

BELL et al. v. MYERS.

INTERFERENCE N o 34,455.

“EXHIBIT N o 1 of Bell et al., Souvenir Volume of Enlarged Photographs Illustrating the Work of the Aerial Experiment Association.”

R. C. Fitzhugh Notary Public.

BULLETINS OF THE Aerial Experiment Association

Bulletin No. XXXIX Issued MONDAY, APRIL 12 1909

APPENDIX B.

A Souvenir Volume of enlarged photographs illustrating the work of the Aerial Experiment Association.

Complimentary . Mrs. Alexander Graham Bell

BEINN BHREAGH, NEAR BADDECK, NOVA SCOTIA

**BULLETIN STAFF.**

Alexander Graham Bell Editor

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Bulletins of the Aerial Experiment Association.

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BULLETIN NO.XXXIX ISSUED MONDAY APRIL 12, 1909 .

APPENDIX B .

Souvenir Volume of Enlarged Photographs illustrating the work of the Aerial Experiment Association.

Beinn Bhreagh, near Baddeck, Nova Scotia.

To Mrs. Alexander Graham Bell.

To whom the Aerial Experiment Association owes its being, and to whose loyal support the Association is indebted for all its successes.

This volume is dedicated.

### **Appendix B .**

A Souvenir Volume of enlarged photographs illustrating the work of the Aerial Experiment Association.

1. Photograph of Mabel Gardiner Bell (Mrs. Alexander Graham Bell), founder of the Aerial Experiment Association.

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2.Group of persons interested in Aerial Locomotion, including all the members of the A.E.A. Photograph taken at Hammondsport, N.Y., April 6, 1908.

### **(Standing — left to right)**

Mr. T.S. Baldwin, who constructed the first dirigible balloon for the United States Government. (Not a member).

Mr. F.W. Baldwin, M.E. Toronto University; Chief Engineer of the A.E.A., who made the first public flight in America in a heavier-than-air flying-machine, March 12, 1908, in the Association's Drome No.1, Selfridge's Red Wing, over the ice on Lake Keuka, near Hammondsport, N.Y.

Mr. J. Newton Williams, who constructed at Hammondsport, N.Y., a full-sized Helicopter to carry a man into the air. (Not a member).

Mr. J.A. Douglas McCurdy, M.E. Toronto University. Assistant Engineer of the A.E.A. Also Treasurer of the Association from the beginning, and Secretary since the death of Lieut. Selfridge. He made the first flight in Canada in a heavier-than-air machine, Feb.23, 1909, in the Association's Drome No.4, McCurdy's Silver-Dart, over the ice in Baddeck Bay, near Baddeck, Nova Scotia.

Lieut. Thomas E. Selfridge, Military Expert in Aerodromics, who was killed Sept. 17, 1908, in the accident to Orville Wright's flying-machine at Fort Meyer, Va. near Washington, D.C. He was detailed by the U.S. Government to observe the experiments of the A.E.A. at Baddeck, N.S. and Hammondsport, N.Y. in the interests of the U.S. Army, and acted as Secretary of the Association. He made an ascent in the Association's Kite Cygnet I, Dec.6, 1907, over the waters of the Bras d'Or Lake, near Baddeck, Nova Scotia.

### **(Sitting — left to right)**

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Dr. Alexander Graham Bell, Chairman of the A.E.A., the only member of the Association who has not been in the air.

Mr. Wm. F. Bedwin, Superintendent of Dr. Bell's Beinn Bhreagh Laboratory. (Not a member).

Mr. Glenn H. Curtiss, Director of Experiments of the A.E.A., and its Chief Executive Officer who made the first measured flight in America in a flying-machine under test conditions, in the Association's Drome No.3, Curtiss' June Bug, July 4, 1908, when he was awarded the Scientific American Trophy by the Aero Club of America.

### **THE KITE CYGNET I.**

3. Kite Cygnet I in the air, towed by the Steamer Blue Hill, near Baddeck, N.S., Dec.4, 1907, The vessel in the picture is the catamaran boat "The Ugly Duckling" from which the Cygnet arose. The Steamer Blue Hill is further to the right beyond the limits of the photograph. This illustrates a preliminary ascension of kite Cygnet I without any man on board.

4. Lieut. Selfridge in the man-hole of Kite Cygnet I Nov.14, 1907.

5. The Kite Cygnet I, on board her tender "The Ugly Duckling", Dec.6, 1907. Lieut. Selfridge, dressed in oilskin, can be seen sitting on the tilting-frame of the "Ugly Duckling".

6. The Kite Cygnet I, on board her tender "The Ugly Duckling", being towed into position on the Little Bras d'Or Lake by the Steamer Blue Hill, Dec.6, 1907. Lieut. Selfridge can be seen stretched at full length in the manhole of the Cygnet I.

7. The Kite Cygnet I, on board her tender "The Ugly Duckling", being towed into position on the Little Bras d'Or by the Steamer Blue Hill, Dec.6, 1907. Photograph taken from the Steamer Blue Hill by Mr. J.G. Davidson.

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8. The Kite Cygnet I, carrying Lieut. Selfridge in the man-hole, flying at an elevation of 168 feet over the Little Bras d'Or Lake, near Baddeck, Nova Scotia, Dec.6, 1907, towed by the Steamer Blue Hill. Photograph taken from the Steamer Blue Hill by Mr. J. G. Davidson.

### **THE HAMMONDSPORT GLIDER .**

9. The Hammondsport Glider, Feb.12, 1908.

10. Mr. Glenn H. Curtiss, gliding down hill in the Hammondsport Glider, at Hammondsport, N.Y., Feb.12, 1908.

### **DROME NO.I, SELFRIDGE'S RED WING 2 .**

11. Drome No.I, Selfridge's Red Wing, on the ice on Lake Keuka, near Hammondsport, N.Y., March 9, 1908. Mr. Wm. F. Bedwin, Superintendent of Dr. Bell's Beinn Bhreagh

12. Drome No.I, Selfridge's Red Wing, on the ice on Lake Keuka, near Hammondsport, N.Y., March 12, 1908. Mr. Glenn H. Curtiss, Director of Experiments of the A.E.A., is in the Aviator's seat.

13. Drome No.I, Selfridge's Red Wing, making its last flight over the ice on Lake Keuka, near Hammondsport, N.Y., carrying Mr. F.W. Baldwin, Chief Engineer of the A.E.A., as Aviator March 17, 1908. The photograph shows a lack of lateral stability in the machine. It has tilted over on one side and is sliding down side-ways towards the ice.

14. Drome No.I, Selfridge's Red Wing, making its last flight over the ice on Lake Keuka, near Hammondsport, N.Y., carrying Mr. F.W. Baldwin as Aviator, March 17, 1908. The Red Wing was tilted over on one side and struck the ice. The photograph shows the wing-piece gradually crushing in, thus acting as a buffer to reduce the shock of landing. The machine was wrecked but the aviator escaped without injury.

**DROME NO. 2, BALDWIN'S WHITE WING.**

15. Drome No.2, Baldwin's White Wing at the racetrack near Hammondsport, N.Y., May 14, 1908. The lateral stability has been improved by the use of lateral rudders attached to the wing-piece.

16. Drome No.2, Baldwin's White Wing making a flight at the race-track near Hammondsport, N.Y., May 18, 1908, carrying Mr. F.W. Baldwin as Aviator.

**DROME NO. 3, CURTISS' JUNE BUG .**

17. Drome No. 3, Curtiss' June Bug at the race-track near Hammondsport, N. Y., June 21, 1908. The lateral stability has been improved by making the lateral rudders normally horizontal instead of in line with the supporting surface ? s.

18. Drome No.3, Curtiss' June Bug, carrying Mr. Glenn H. Curtiss as Aviator, July 1, 1908, at the race-track near Hammondsport, N. Y. Photograph taken at dusk by Mr. H. M. Benner of Hammondsport.

19. Drome No. 3, Curtiss' June Bug, carrying Mr. Glenn H. Curtiss as Aviator, at the race-track near Hammondsport, N. Y., First flight of July 4, 1908.

20. Drome No. 3, Curtiss' June Bug, carrying Mr. Glenn H. Curtiss as Aviator, at the race-track near Hammondsport, N. Y., This was the second flight of July 4, 1908 for which the Scientific American Trophy was awarded by the Aero Club of America.

21. Drome No. 3, Curtiss' June Bug, carrying Mr. Glenn H. Curtiss as Aviator, July 10, 1908, near Hammondsport, N. Y.

22. Drome No. 3, Curtiss' June Bug, carrying Mr. J. A. Douglas McCurdy as Aviator, at the race-track near Hammondsport, N. Y., July 27, 1908.

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23. Drome No. 3, Curtiss' June Bug placed upon pontoons and re-named "The Loon", at Hammondsport, N. Y., Nov. 5, 1908.

24. Drome No. 3, Curtiss' June Bug on pontoons and rename? "The Lo on" on Lake Keuka, near Hammondsport, N. Y. Nov. 5, 1908

25. Drome No. 3, Curtiss' June Bug on pontoons and re-named "The Loon", propelled over the water on Lake Keuka, near Hammondsport, N. Y., carrying Mr. Douglas McCurdy as Aviator, Nov. 30, 1908. "The Loon" did not rise into the air.

### **DROME NO. 4, McCURDY'S SILVER-DART .**

26. Drome No. 4, McCurdy's Silver-Dart at the race-track near Hammondsport, N. Y., Nov. 3, 1908.

27. Drome No. 4, McCurdys' Silver-Dart, at the race-track near Hammondsport, N. Y., carrying Mr. J. A. Douglas McCurdy as Aviator, Dec. 13, 1908.

28. Drome No. 4, McCurdy's Silver-Dart, carrying Mr. J. A. Douglas McCurdy as Aviator, over the ice on Baddeck Bay, near Baddeck, Nova Scotia, Feb. 24, 1909.

29. Drome No. 4, McCurdy's Silver-Dart, carrying Mr. J. A. Douglas McCurdy as Aviator, over the ice on Baddeck Bay near Baddeck, Nova Scotia, March 8, 1909. This photograph shows Mr. McCurdy passing the old McCurdy Homestead where he lived as a boy.

30. Drome No. 4, McCurdy's Silver-Dart, carrying Mr. J. A Douglas McCurdy as Aviator, over the ice in the Harbor at Baddeck, Nova Scotia, March 8, 1909.

### **DROME NO. 5, BELL'S CYGNET II .**

31. Drome No. 5, Bell's Cygnet II, on the ice in Baddeck Bay, near Baddeck, Nova Scotia, Feb. 22, 1909. Side-view showing the hollow construction.

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DR. A. G. BELL, MR. I. NEWTON WILLIAMS, CAPT. T. BALDWIN, MR. G. H. CURTISS, MR. T. A. D. McCURDY, AND MR. W. F. BEDWIN, NEAR AERODROME AT HAMMONDSPORT, N. Y., APRIL 6, 1908.

3

KITE CYGNET I, IN THE AIR, TOWED BY THE STEAMER BLUE HILL, NEAR BADDECK N. S. DEC. 4, 1907. THE VESSEL IN THE PICTURE IS THE UGLY DUCKLING FROM WHICH THE CYGNET AROSE.

4

79 Taken 1907 by Dev. 1907 Nov 15 LIEUT. SELFRIDGE IN THE MANHOLE OF THE KITE CYGNET, NOV. 14, 1907.

5

NETI, ON BOARD HER TENDER THE UGLY DUCKLING, DECEMBER, 1909 LIEUT. SELFRIDGE DRESSED IN OIL CAN BE SEEN SETTING ON TESTING FRAME OF THE UGLY DUCKLING

6

KITE CYGNET I, ON BOARD THE UGLY DUCKLING, BEING TOWED INTO POSITION OVER THE LITTLE BRAS DOR LAKE BY THE STEAMER BLUE HILL, DEC. 6, 1907. LIEUT. SELFRIDGE CAN BE SEEN STRETCHED AT FULL LENGTH IN THE MANHOLE OF THE CYGNET.

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KITE CYGNET I, WITH LIEUT. SELFRIDGE ON BOARD, ON HER TENDER THE UGLY DUCKLING BEING TOWED INTO POSITION FOR AN ALCECION DEC. 6, 1907, ON THE LITTLE BRAS DON LAKE, BY MR. T. G. DAVID SON.

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KITE CYGNET I, WITH LIEUT. SELFRIDGE ON BOARD, FLYING OVER THE LITTLE BRAS D'OR LAKE, NEAR BADDECK, NOVA SCOTIA, DEC. 6, 1907. PHOTO TAKEN FROM THE STEAMER BLUE HILL BY MR. J.G. DAVIDSON.

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THE HAMMONDSPORT GLIDER, FEB. 12, 1908.

10

MR. GLENN H.CURTIS GLIDING DOWN HILL IN THE HAMMONDSPORT GLIDER AT HAMMONDSPORT. N.Y. FEB. 12, 1908.

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DROME NO.1 SELFRIDGE'S CURTISS ON BOARD ON THE ICE ON LAKE KEUKA, NEAR HAMMONDSPORT, N.Y. MARCH 12, 1908

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DROME NO I. SELFRIDGE'S REDWING FLYING OVER THE ICE ON LAKE KEUKA NEAR HAMMONDSPORT. N.Y. CARRYING MR. F.W. BALDWIN AS AVIATOR ON MARCH 17, 1908. TAKEN IMMEDIATELY BEFORE CATASTROPHE WHICH WRECKED THE MACHINE BUT LEFT THE AVIATOR UNINJURED.

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DROME NO I. SELFRIDGE'S REDWING ON THE ICE LAKE KEUKA NEAR HAMMONDSPORT, N.Y., CARRYING MR. F.W. BALDWIN AS AVIATOR. THE REDWING STRUCK THE ICE ON ONE WING AND WAS WRECKED. THE PHOTO SHOWS THE WING-PIECE CRUSHING IN. THUS ACTING AS A BUFFER TO REDUCE THE SHOCK TO THE AVIATOR. THE MACHINE WAS DESTROYED, BUT MR. BALDWIN ESCAPED WITHOUT INJURY PHOTO TAKEN MARCH 17, 1908

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DROME NO.1, BALDWIN'S WHITE-WING, AT HAMMONDSPORT,N.Y. MAY 14, 1908.

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DROME NO 2. BALDWIN'S WHITE WING CARRYING MR F.W. BALDWIN AS AVIATOR, MAY 18, 1908, AT HAMMONDSPORT, N.Y.

17

DROME NO 3, CURTISS' JUNE BUG, AT HAMMONDSPORT, N.Y. JUNE 21, 1908.

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DROME NO.3. CURTISS' JUNE BUG, CARRYING MR CLENN? CURTISS AS AVIATOR, JULY 1, 1908 AT HAMMONDSPORT. N.Y. PHOTO TAKEN AT DUSK.

19

DROME NO.3 CURTISS' JUNE BUG, CARRYING MR. GLENN H. CURTISS AS AVIATOR, AT HAMMONDSPORT, N.Y.

20

DROME NO.3 CURTISS JUNE BUG, CARRYING MR. GLENN H. CURTISS AS AVIATOR, JULY 4, 1908 AT HAMMONDSPORT, N.Y.,WHERE HE WON THE SCIENTIFIC AMERICAN TROPHY BY FLYING ONE KILOMETER.

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DROME NO. 3, CURTISS' JUNE BUG, CARRYING MR. GLENN H. CURTISS AS AVIATOR, JULY 10, 1908 AT HAMMONDSPORT, N.Y.

22

DROME NO. 3 CURTISS JUNE BUG, CARRYING MR. DOUGLASS McCURDY, AS AVIATOR, AT HAMMONDSPORT, N.Y. JULY 27, 1908.

23

DROME NO. 3 CURTISS' JUNE BUG PLACED ON PONTOONS AND RENAMED THE LOON, ON LAKE KEUKA, HAMMONDSPORT, N.Y. NOV. 5, 1908.

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DROME NO. 3. CURTISS' JUNE BUG ON PONTOONS AND RENAMED THE LOON AT HAMMONDSPORT, N.Y. NOV. 5, 1908

25

DROME NO.3. CURTISS' JUNE BUG, PLACED UPON PONTOONS AND RE-NAMED THE LOON, PROPELLED OVER THE WATER ON LAKE KEUKA, NEAR HAMMONDSPORT, N.Y, CARRYING MR. DOUGLAS McCURDY AS AVIATOR, NOV. 30, 1908. THE LOON DID NOT RISE INTO THE AIR

26

DROME NO 4, McCURDY'S SILVER-DART AT HAMMONDSPORT, N.Y. NOV. 3, 1902.

27

SILVER-DART, CARRYING MR. DOUGLAS McCURDY AS AVIATOR AT HAMMONDSPORT, N.Y. DEC. 12, 1908

28

DROME NO.4, McCURDY'S SILVER-DART, CARRYING MR. DOUGLAS McCURDY AS AVIATOR, OVER THE ICE ON BADDECK BAY, BADDECK, N.S. FEB. 24, 1909.

Feb 23 as date for this per 29

DROME NO 4 M. CURDYS SILVER-DART, CARRYING MR. DOUGLAS M. CURDY AS AVIATOR OVER THE ICE ON BADDECK BAY MARCH 8, 1909

30

DROME NO. 4, McCURDY'S SILVER-DART, CARRYING MR. DOUGLAS McCURDY AS AVIATOR, OVER THE ICE IN THE HARBOR AT BADDECK, NOVA SCOTIA, MARCH 8, 1909.

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SIDE VIEW OF CYGNET II, TAKEN ON ICE IN BADDECK BAY FEB 2? 19??

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